

WHAT IS CLAIMED IS:

1. A measuring device controlling adapter coupled to a first network and to a measuring unit for performing a measurement process comprising:

a program receiving unit for receiving a control program for performing said measurement process from said first network;

a memorizing unit for memorizing said control program; an initiating instruction receiving unit for receiving a program initiating instruction of said measurement process by the measuring unit through said first network; and

a measurement control unit for letting said measuring unit perform said measurement process based on said control program memorized by said memorizing unit in case said initiating instruction receiving unit receives said program initiating instruction.

2. A measuring device controlling adapter claimed in claim 1, wherein said measuring device controlling adapter is coupled to a second network;

and said measurement control unit comprises,

a command generating unit for generating a control command which controls said measuring unit;

a command transferring unit for transferring said control command to said measuring unit through said second network; and

a measurement result receiving unit for receiving a measurement result of said measurement process from said measuring unit.

3. A measuring device controlling adapter claimed in claim 1 or claim 2 further comprising:

a measurement result transferring unit for transferring said measurement result through said first network.

4. A measuring device controlling adapter claimed in claim 3 further comprising:

a transfer destination memorizing unit for memorizing identification information of a transfer destination of said measurement result,

wherein said measurement result transferring unit transfers said measurement result to said transfer destination based on said identification information.

5. A measuring device controlling adapter claimed in claim 4 further comprising:

a transfer destination receiving unit for receiving said identification information of said transfer destination of said measurement result through said first network; and

a transfer destination registration unit for storing said received identification information of said transfer destination in said transfer destination memorizing unit.

6. A measuring device controlling adapter claimed in one of claims 1 to 5, wherein

said program receiving unit receives at least a portion of each of a plurality of said control programs,
said memorizing unit memorizes a plurality of said control programs,
and

said command generating unit selects said control program being performed from said memorizing unit based on said program initiating instruction and generates said control command based on said control program.

7. A measuring device controlling adapter claimed in one of claims 1 to 6, wherein said measurement result transferring unit converts said measurement result into data of a predetermined format, and transfers an object having said measurement result converted in said predetermined data format and information for reconverting

said converted measurement result into original one to said second network.

8. A measuring device controlling adapter claimed in one of claims 1 to 7 further comprising:

an error detecting unit for detecting a predetermined error during said measurement process; and

an error information transferring unit for transferring information relating to said error through said first network.

9. A measuring device controlling adapter claimed in one of claims 1 to 8, wherein said first network is Ethernet.

10. A measuring device controlling adapter claimed in one of claims 2 to 9, wherein said second network is GPIB.

11. A measuring device controlling adapter claimed in one of claims 1 to 10 further comprising;

a program running unit capable of executing a program described in Java (TM) language,

wherein said control program is described in Java language, and

at least one of said command generating unit and said command transferring unit is embodied by said program running unit which executes said control program.

12. A measuring device comprising a measuring device controlling adapter claimed in claim 1 and said measuring unit for performing said measurement process.

13. A measuring device claimed in claim 12, wherein said initiating instruction receiving unit receives a program initiating instruction of said control program from said first network.

14. A measuring device claimed in claim 12 or claim 13 further comprising:

a processing information transferring unit for transferring information relating to said measurement process through said first network.

15. A measuring device claimed in one of claims 12 to 14, wherein said measuring device is coupled to a third network,

said control program further comprises contents relating to another measurement process performed by another measuring device coupled to said third network, and

said measurement control unit further lets said other measuring device perform said other measurement process based on said control program.

16. A measuring device claimed in claim 15 further comprising:

a measuring device information memorizing unit for relationally memorizing at least two (2) kinds of information respectively identifying said measurement process and said measuring device which performs said measurement process; and

a measuring device identifying unit for identifying said measuring device which performs said measurement process of said control program based on information of said measuring device information memorizing unit,

wherein said measurement control unit lets said identified measuring device perform said measurement process.

17. A measuring device claimed in one of claims 12 to 16, wherein said control program comprises contents prescribing a plurality of measurement processes,

further comprising a performing sequence determining unit for determining a sequence for performing said plurality of measurement processes based on said control program,

wherein said measurement control unit lets said plurality of measurement processes be performed according to said sequence.

18. A measuring device claimed in one of claims 12 to 17 further comprising:

a measurement process information memorizing unit for memorizing measurement process information which identifies said measurement process which can be performed in parallel,

wherein said measurement control unit lets said measurement process, which can be performed in parallel, be performed in parallel based on said measurement process information.

19. A measuring system comprising:

a measuring device, which comprises a measuring unit for performing a measurement process; and

a control host, which controls said measurement process by said measuring device through a first network,

wherein said control host comprises:

a program transferring unit for transferring a control program to said measuring device; and

an initiating instruction transferring unit for transferring a program initiating instruction of measurement process of said measuring device, and

said measuring device comprises:

a program receiving unit for receiving said control program from said first network;

a memorizing unit for memorizing said control program;

an initiating instruction receiving unit for receiving a program initiating instruction of said measurement process; and

a measurement control unit for controlling said measuring device based on said control program memorized by said memorizing unit in case said initiating instruction receiving unit receives said program

initiating instruction.

20. A measuring system claimed in claim 19, wherein said measuring device is coupled to said control host through said first network, further comprising a measuring device controlling adapter coupled to said measuring unit through a second network, wherein

said measuring device controlling adapter comprises:

a program receiving unit for receiving a control program for controlling said measuring device from said first network;

a memorizing unit for memorizing said control program;

an initiating instruction receiving unit for receiving a program initiating instruction of said measurement process by said measuring unit through said first network; and

a command generating unit for generating said control command based on said control program memorized by said memorizing unit in case said program initiating instruction is received;

a command transferring unit for transferring said control command to said measuring device through said second network based on said control program memorized by said memorizing unit; and

a measurement result receiving unit for receiving a measurement result of said measurement process from said measuring device, and

said measuring unit comprises:

a measuring unit for performing a measurement process based on said transferred control command; and

a measurement result transferring unit for transferring a measurement result of said measurement process to said measuring device controlling adapter.

21. A measuring system claimed in claim 20 further comprising:

a display host for displaying a result of said measurement process by said measuring device, said display host being coupled to said measuring device controlling adapter through said first network, wherein

said measuring device controlling adapter comprises a measurement result transferring unit for transferring said measurement result through said first network, and

said display host comprises:

a second measurement result receiving unit for receiving said measurement result transferred from said measurement result transferring unit; and

a display unit for displaying said measurement result.

22. A measuring system claimed in claim 21, wherein

said measuring device controlling adapter further comprises:

a transfer destination memorizing unit for memorizing identification information of said display host which is a transfer destination of said measurement result;

a transfer destination receiving unit for receiving said identification information of said display host which is a transfer destination of said measurement result through said first network; and

a transfer destination registration unit for memorizing said received identification information in said transfer destination memorizing unit, and

said measurement result transferring unit transfers said measurement result to said display host of said transfer destination based on said identification information, and said display host further comprises:

a transfer destination information transferring unit for transferring said identification information of said display host to said measuring device controlling adapter through said first network.

23. A measuring system claimed in one of claims 20 to 22 wherein said measuring device controlling adapter further comprises:

an error detecting unit for detecting a predetermined error during said measurement process; and

an error information transferring unit for transferring information relating to said error to said control host through said first network, and

said control host further comprises:

an error information receiving unit for receiving information relating to transferred error through said first network; and

an error display unit for displaying said received information relating to error.

24. A measuring system claimed in claim 19, wherein

said control host further comprising an initiating instruction transferring unit for transferring a program initiating instruction of said control program, and

said initiating instruction transferring unit receives said program initiating instruction through said first network.

25. A measuring system claimed in claim 24, wherein

said measuring device further comprises a processing information transferring unit for transferring processing information relating to said measurement process to said control host through said first network, and

said control host further comprises;

a processing information receiving unit for receiving said processing information transferred from said processing information transferring unit; and

a display unit for displaying said processing information.

26. A measuring system claimed in claim 24 or claim 25, wherein
 said measuring device is further coupled to another network,
 said control program further comprises contents relating
 to another measurement process performed by another measuring
 device coupled to said other network, and
 said measurement control unit further controls another
 measurement process by said other measuring device based on said
 control program.

27. A measuring system claimed in claim 26, further comprising:
 a measuring device information memorizing unit for
 relationally memorizing at least two (2) kinds of information
 respectively identifying said measurement process and said
 measuring device which performs said measurement process; and
 a measuring device identifying unit for identifying said
 measuring device which performs said measurement process of said
 control program based on information of said measuring device
 information memorizing unit,
 wherein said measurement control unit lets said identified
 measuring device perform said measurement process.

28. A measuring system claimed in one of claims 24 to 27,
 wherein said control program comprises contents prescribing
 a plurality of said measurement processes,
 further comprising a performing sequence determining unit
 for determining a sequence for performing said plurality of
 measurement processes based on said control program,
 wherein said measurement control unit lets said plurality of
 measurement processes be performed according to said sequence.

29. A measuring system claimed in one of claims 24 to 28 further
 comprising:
 a measurement process information memorizing unit for

memorizing measurement process information which identifies said measurement process which can be performed in parallel,

wherein said measurement control unit lets said measurement process, which can be performed in parallel, be performed in parallel based on said measurement process information.

30. A measuring device controller coupled to a network for controlling a measuring device performing a measurement process comprising:

a program memorizing unit for memorizing a control program which comprises contents prescribing said measurement process;

a measuring device detecting unit for detecting said measuring device which performs said measurement process based on said control program; and

a measurement control unit for letting said detected measuring unit perform said measurement process based on said control program through said network.

31. A measuring device controller coupled to a network for controlling a measuring device performing a measurement process comprising:

a program memorizing unit for memorizing a control program which comprises contents prescribing said measurement process;

a parallel process detecting unit for detecting a plurality of measurement processes which can be performed in parallel from said measurement processes based on said control program; and

a measurement control unit for letting said measuring unit perform said plurality of measurement processes detected by said parallel process detecting unit in parallel.

32. A measurement process performing method for letting a measuring device coupled through a network perform a measurement process, wherein said measuring device has a measuring unit for performing said measurement process, comprising:

a program receiving step for receiving a control program for controlling said measuring unit through said network;

an initiating instruction receiving step for receiving a program initiating instruction of said control program; and

a control step for controlling said measurement process by said measuring unit based on said control program in case said program initiating instruction is received.

33. A measurement process performing method claimed in claim 1, wherein said control step comprises:

a command generating step for generating a control command based on said control program;

a measuring command transferring step for transferring said generated control command to said measuring device;

a measurement result receiving step for receiving a measurement result; and

a measurement result transferring unit for transferring said measurement result through said first network.

34. A recording medium on which a program for letting a measuring device coupled through a network perform a measurement process, wherein said measuring device has a measuring unit for performing said measurement process, is recorded comprising:

a program receiving module for activating reception of a control program, which comprises contents relating to said measurement process, from said network;

a memorizing module for storing said control program; and

an initiating instruction receiving module for activating reception of a program initiating instruction of said control program.